

WHAT DOES THE PLUNGER DO?

The plunger is designed to apply pressure against the filament to hold it tightly against the teeth of the Drive Wheel, which pulls the filament down into the barrel for printing. There is a grub that you can access from behind the filament fan to tighten the plunger (see page 54 of your manual and fig 1.1)

WHAT GOES WRONG?

In most cases the adjusted plunger will only require maintenance every 10 or so hours. However filament changes can accelerate this need. In addition, some users have found that the grub screw can shake loose with use. Lastly, the plunger can become worn and as a result stop functioning.

WHAT DOES PLUNGER FAIL LOOK LIKE?

A failing plunger commonly cause the following symptoms :

- Print starts well but then just stops. The last layers tend to look fluffy.
- Prints look stripy and have gaps in them

There are some photos below for your reference.

HOW DO YOU FIX IT?

Short term

If the plunger is worn and new plunger will get you going again. We supply these free to our customers. Let us know if you need one.

If it is not worn, simply tightening the plunger will fix the issue. We find doing the fine adjustment with the machine on and running load allows you to see when the filament flow is at the highest rate—the sweet spot ;)

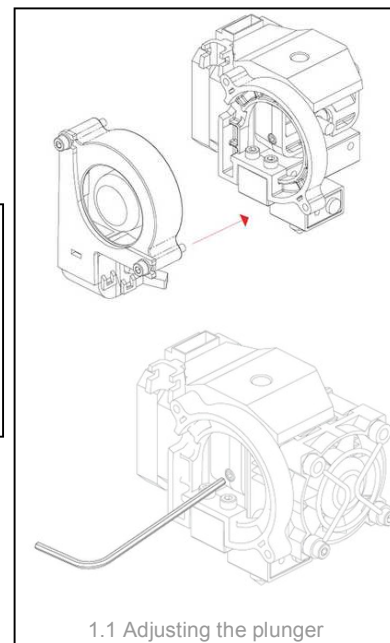
Longer Term

We highly recommend upgrading the filament feeder system to a *constant pressure* system, like the one we have available on our site and pictured right (Fig 1.3)

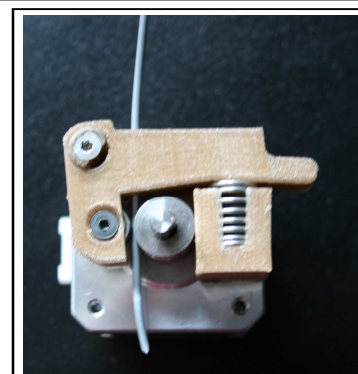
This system is also recommended by Makerbot.



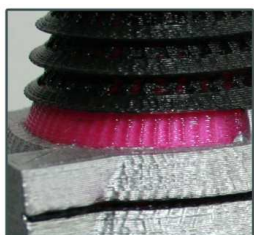
1.2 Worn plunger



1.1 Adjusting the plunger



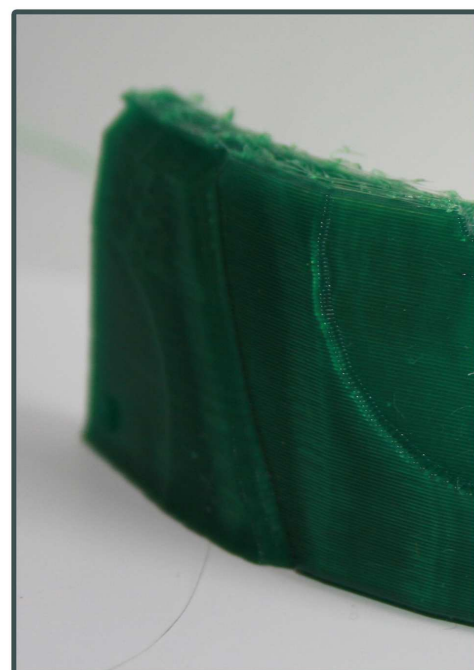
1.3 Our Filament Feeder System



PERFECT 270 MICRON PRINT



PLUNGER FAILURE



BilbyCNC hopes you found this helpful. Please visit support.bilbycnc.com.au if you need further assistance